



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/628,427

07/29/2003

Larry Earl Peterson

95-496

4170

23164

7590

04/03/2007

LEON R TURKEVICH

2000 M STREET NW

7TH FLOOR

WASHINGTON, DC 200363307

EXAMINER

YUEN, KAN

ART UNIT

PAPER NUMBER

2616

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
--	-----------	---------------

3 MONTHS

04/03/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

5X

Office Action Summary	Application No.		Applicant(s)	
	10/628,427		PETERSON ET AL.	
	Examiner		Art Unit	
	Kan Yuen		2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 July 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>10/29/2003</u> . | 6) <input type="checkbox"/> Other: _____ |

Detailed Action

Claim Objections

1. Claims 4, 12, 20 are objected to because of the following informalities:

In claim 4, line 13, the term "the override configuration", seems to be referring to the term "Loadshare Bindings". If this is true, it is suggested to change the term "the override configuration" to "the Loadshare Bindings". Similar problem exist in claims 12 and 20.

Appropriate correction is required.

Drawing Objections

2. The drawings are objected to under 37 CFR 1.83(a) because they fail to show clarity in drawings 1-6 as described in the specification. It is suggested that the applicant to provide computer sketch drawings, instead of "handwriting" labels. Addition to the objection, applicant is suggested to provide clean and clear drawings. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary,

Art Unit: 2616

the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

In addition to Replacement Sheets containing the corrected drawing figure(s), applicant is required to submit a marked-up copy of each Replacement Sheet including annotations indicating the changes made to the previous version. The marked-up copy must be clearly labeled as "Annotated Sheets" and must be presented in the amendment or remarks section that explains the change(s) to the drawings. See 37 CFR 1.121(d)(1). Failure to timely submit the proposed drawing and marked-up copy will result in the abandonment of the application.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 4, 12, and 20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 4, 12 and 20 are considered to be vague and indefinite, because the congestion level can't be set based on the override configuration, loadshare configuration, broadcast configuration and loadshare binding configuration at the same time. Therefore, the claims 4, 12 and 20 will be treated in alternative by changing the conjunction "and" to "or".

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1, 9, and 17 are rejected under 35 U.S.C. 102(e) as being anticipated by Delaney et al. (Pub No.: 2004/0141514).

For claims 1, 9, and 17, Delaney et al. disclosed the method in a signaling gateway in a network, the method including: determining a congestion level for each of a plurality of application server process groups (See fig. 8 e.g. box 500, 502, 504, and 506), each application server process group having at least one assigned application server process configured for providing services for a corresponding message signaling unit attribute, each application server process assigned to one of the application server

Art Unit: 2616

process groups, the signaling gateway having a prescribed point code (See fig. 8 e.g. box 400) (See paragraph 0035, lines 1-20); As mentioned in the reference, the signal transfer point can be an IP signaling gateway (See paragraph 0011, lines 1-10); receiving an SS7 message having an originating point code specifying an originating node and a destination point code specifying the prescribed point code, the SS7 message carrying a message signaling unit having specified attributes (See paragraph 0035, lines 1-20); identifying one of the application server process groups as a candidate group for processing the message signaling unit based on a determined match between the corresponding message signaling unit attribute and at least a corresponding portion of the specified attributes (See paragraph 0012, lines 1-20) and (See paragraph 0016, lines 1-5); As disclosed in the reference, the servers (See fig. 8 e.g. box 500, 502, 504, and 506) by using origination information associated with a source to make a routing decision among multiple routes to the same DPC, and each originating server provides different quality of services, e.g. high speed or low speed; and selectively sending to the originating node a congestion notification message based on determining that an identified priority of the message signaling unit does not exceed the corresponding congestion level for the candidate group (See paragraph 0047, lines 1-12). In the reference, the MSU may be discarded based on priority.

Addition to claim 17, Delaney et al. also disclosed the method of computer readable medium having stored thereon sequences of instructions for controlling congestion in a network by a signaling gateway, the sequences of instructions including

instructions mentioned in above (See paragraph 0013, lines 1-12). In the reference, Delaney et al. stated that the invention can be may be implemented in software.

Regarding to claims 5, 13, and 21, Delaney et al. also disclosed the method of a first and second of the application server process groups are configured for providing Signalling Connection Control Part (SCCP) message service and ISDN User Part message service as the respective message signaling unit attributes (See paragraph 0011, lines 8-17) and (See paragraph 0037, lines 8-15).

Regarding to claims 6, 14, and 22, Delaney et al. also disclosed the method of receiving a second SS7 message having a second originating point code specifying a second originating node (See fig. 7, point 202, and 204 also M1, M2) and the destination point code specifying the prescribed point code, and carrying a second message signaling unit having second specified attributes (See paragraph 0043, lines 1-15); as disclosed in the reference, plurality of SS7 messages are generated and received throughout the system. Identifying another one of the application server process groups as a second candidate group based on determined match between the corresponding message signaling unit attribute and at least a corresponding portion of the second specified attributes, distinct from the portion of the specified attributes of the message signaling unit (See paragraph 0012, lines 1-20) and (See paragraph 0016, lines 1-5); In the reference, the signaling node engaged with the first service provider for high speed transmission, moreover, the first service provider also have an alternative service provider (second service provider) to provide high speed path, therefore, this implicitly implies that the signaling node identified the second service provider. Sending

the second message signaling unit to an identified active one of the application server processes of the another one of the application server process groups, based on a determined priority of the second message signaling unit exceeding the congestion level of the second candidate group and independent of the congestion level of the candidate group (Delaney et al. See paragraph 0047, lines 1-12).

Regarding to claims 7, 15, and 23, Delaney et al. also disclosed the method of selectively outputting to an identified one of the assigned application server processes of the candidate group the message signaling unit based on determining that the identified priority of the message signaling unit exceeds the corresponding congestion level for the candidate group (See paragraph 0049, lines 1-18).

Regarding to claims 8, 16, 24, Delaney et al. also disclosed the method of the selectively outputting includes identifying the identified one assigned application server process based on receiving an application server process active message from the identified one assigned application server process (See paragraph 0049, lines 1-10). As disclosed in the reference, in response to the TFC message sent by the signaling point, any server (Fig. 8, e.g. 500, 502) can send a request message to the signaling point for alternate route.

Claim Rejections - 35 USC § 103

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

Art Unit: 2616

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2, 10, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Delaney et al. (Pub No.: 2004/0141514), in view of Archer (Pat No.: 6747955).

For claims 2, 10, and 18, Delaney et al. disclosed all the subject matter of the claimed invention with the exception of the determining step includes determining the congestion levels for each application server process group based on a corresponding traffic configuration. Archer from the same or similar fields of endeavor teaches the use

Art Unit: 2616

of determining step includes determining the congestion levels for each application server process group based on a corresponding traffic configuration (see column 3, lines 5-30). In the reference, the signal transfer point 16 is setup for monitoring congestion in connections between service switching points 20. The status of a link is rated from level 0 to level 3, where level 0 is no traffic, and level 3 is maximum traffic. Thus, it is obvious to the person of ordinary skilled in the art at the time of the invention to use the method as taught by Archer in the network of Delaney et al. The method as taught by Archer can be implemented into the network of Delaney et al. by adding the STP 16 in the network of Delaney et al. The motivation for using the method as taught by Archer in the network of Delaney et al. being that it will determine a link to route the message based on the congestion level of the message.

Regarding to claims 3, 11, and 19, Delaney et al. disclosed all the subject matter of the claimed invention with the exception of using the method for the traffic configuration includes one of an override configuration, a loadshare configuration, a broadcast configuration, and a loadshare bindings configuration. Archer from the same or similar fields of endeavor also teaches the method for the traffic configuration includes an override configuration (see column 3, lines 5-30). In the reference, the level is determined based on the maximum level of 3, which is override configuration. Thus, it is obvious to the person of ordinary skilled in the art at the time of the invention to use the method as taught by Archer in the network of Delaney et al. The method as taught by Archer can be implemented into the network of Delaney et al. by adding the STP 16 in the network of Delaney et al. The motivation for using the method as taught by Archer

in the network of Delaney et al. being that it will determine a link to route the message based on the congestion level of the message.

Regarding to claims 4, 12, 20, Delaney et al. disclosed all the subject matter of the claimed invention with the exception of using the determining includes: selectively setting the congestion level for a corresponding application server process group based on a highest determined congestion of an associated one of the application server processes, based on the corresponding application server process group having the override configuration (see column 3, lines 5-30). In the reference, the level is determined based on the maximum level of 3, which is override configuration. Thus, it is obvious to the person of ordinary skilled in the art at the time of the invention to use the method as taught by Archer in the network of Delaney et al. The method as taught by Archer can be implemented into the network of Delaney et al. by adding the STP 16 in the network of Delaney et al. The motivation for using the method as taught by Archer in the network of Delaney et al. being that it will determine a link to route the message based on the congestion level of the message.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Niermann (Pub No.: 2002/0131427), Niermann (Pat No.: 6920144), Yi (Pat No.: 7035218), and Gilchrist et al. (Pub No.: 2004/0008734), are show systems which considered pertinent to the claimed invention.

Art Unit: 2616

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kan Yuen whose telephone number is 571-270-2413.

The examiner can normally be reached on Monday-Friday 10:00a.m-3:00p.m EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky O. Ngo can be reached on 571-272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ky


RICKY Q. NGO
SUPERVISORY PATENT EXAMINER